ABSTRACT OF THE DISCLOSURE

In a communications network, each network node includes a first module that handles a group of channels between its input and output ports as a route decision unit and a second module that handles a channel between its input and output ports as a route decision unit. A module state database stores module cost data of the first and second modules and a link state database stores link cost data of the links. Using the module and link state databases a route of minimum cost is determined and a connection is established between an incoming link and one of the input ports of the first and second modules and a connection is established between one of the output ports of the first and second modules and an outgoing link. The contents of the module and link state databases are broadcast to the network.